IN THE CLAIMS:

Listing of the Claims:

1. (allowed) A method for assessing the risk of transplantation rejection in a recipient host comprising the following steps:

(a) determining the HLA-DR of the recipient and the HLA-DR of a donor and determining if the recipient and donor are DR mismatched;

(b) assaying for the presence of activated T-lymphocytes in the recipient;

(c) assaying for the presence of circulating IgG anti-HLA Class II antibodies in the serum of the recipient;

wherein the presence of activated T-lymphocytes in the recipient and the presence of circulating IgG anti-HLA Class II antibodies in a DR mismatched recipient indicates a high risk of transplantation rejection.

2. (allowed) The method of claim 1 wherein the recipient host has received a tissue allograft.

3. (allowed) The method of claim 1 wherein the recipient host has received a heart transplant.

4. (allowed) The method of claim 1 wherein the HLA-DR of the recipient is determined using a microcytotoxicity assay.

5. (allowed) The method of claim 1 wherein the HLA-DR of the recipient is determined using a mixed lymphocyte reaction.

6. (allowed) The method of claim 1 wherein the HLA-DR of the recipient is determined using a polymerase chain reaction.

7. (allowed) The method of claim 1 wherein the presence of antigen activated lymphocytes is measured using a lymphocyte growth assay.

Claims 8-18 (withdrawn).

19. (rejected) A method for predicting whether or not a ~~transplant~~ post-transplant recipient is likely to reject a tissue allograft comprising detection of IgG anti-HLA DR antibodies in the serum of the ~~transplant~~ post-transplant recipient against a panel of control B lymphocytes wherein detection of such antibodies indicates that the ~~transplant~~ post-transplant recipient is likely to reject a tissue allograft.